

## RAND RESEARCH AREAS

CHILDREN AND FAMILIES  
EDUCATION AND THE ARTS  
ENERGY AND ENVIRONMENT  
HEALTH AND HEALTH CARE  
INFRASTRUCTURE AND  
TRANSPORTATION  
INTERNATIONAL AFFAIRS  
LAW AND BUSINESS  
NATIONAL SECURITY  
POPULATION AND AGING  
PUBLIC SAFETY  
SCIENCE AND TECHNOLOGY  
TERRORISM AND  
HOMELAND SECURITY

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of published, peer-reviewed documents.

Corporate Headquarters  
1776 Main Street  
P.O. Box 2138  
Santa Monica, California  
90407-2138  
TEL 310.393.0411  
FAX 310.393.4818

© RAND 2011

[www.rand.org](http://www.rand.org)

# Addressing Psychological Health and Traumatic Brain Injury Among Servicemembers and Their Families

## Existing Department of Defense Programs and Options for Improvement

### Key findings:

- The Department of Defense currently sponsors or funds more than 200 programs to address psychological health and traumatic brain injury.
- There is duplication of effort across programs, both within and across branches of service.
- Challenges to maximizing the effectiveness of these programs include the decentralized nature of these programs and the lack of a process to systematically develop, track, and evaluate program effectiveness.
- Improved planning and coordination, the sharing of information, and rigorous evaluation are key to expanding efforts to better support servicemembers and their families.

Over the past decade, U.S. military forces have engaged in extended conflicts that are characterized by increased operational tempo, most notably in Iraq and Afghanistan. While most military personnel cope well under these difficult circumstances, many have experienced and will continue to experience difficulties related to post-traumatic stress disorder (PTSD, an anxiety disorder that can develop after direct or indirect exposure to an event or ordeal in which grave physical harm occurred or was threatened) or major depression. Others live with the short- and long-term psychological and cognitive consequences of traumatic brain injury (TBI), an injury that has become increasingly common with the growing use of improvised

explosive devices on the battlefield. Deployment may also have consequences for military families, particularly for marriage and intimate relationships, the well-being of spouses and partners, parenting practices, and children's well-being.

Over the past several years, the Department of Defense (DoD) has implemented numerous programs to support servicemembers and their families in these areas. These programs focus on a variety of clinical and nonclinical concerns and address various components of biological, psychological, social, spiritual, and holistic influences on psychological health. Despite the proliferation of programs and related efforts, an ongoing challenge for DoD is to identify and characterize the scope, nature, and effectiveness of these various and ever-evolving activities. To address this need, the Assistant Secretary of Defense for Health Affairs asked the RAND National Defense Research Institute to develop a comprehensive catalog of existing programs currently sponsored or funded by DoD to address psychological health and TBI.

The result is a new RAND report that provides a "snapshot" of all programs currently sponsored or funded by DoD that address psychological health and TBI. RAND researchers identified and characterized more than 200 programs and described a number of barriers to maximizing the effectiveness of these programs, including the decentralized nature of the programs and the lack of a process to systematically develop, track, and evaluate programs. RAND provided recommendations for clarifying the role of programs, examining gaps in routine service delivery that could be filled by programs, reducing barriers faced by programs, and building the evidence base regarding program effectiveness.

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>2011</b>		2. REPORT TYPE		3. DATES COVERED <b>00-00-2011 to 00-00-2011</b>	
4. TITLE AND SUBTITLE <b>Addressing Psychological Health and Traumatic Brain Injury Among Servicemembers and Their Families: Existing Department of Defense Programs and Options for Improvement</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>RAND Corporation,Center for Military Health Policy Research,1776 Main Street, PO Box 2138,Santa Monica,CA,90407-2138</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>	18. NUMBER OF PAGES <b>5</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			

## What Is a Program?

In the study, the term *program* is used to describe entities that provide active services, interventions, or other interactive efforts to address psychological health, as well as care for servicemembers (and their families) who are experiencing such problems as PTSD, anxiety, depression, and TBI. Programs are distinct from clinical care services (e.g., mental health clinics, medical services for physical health problems), non-clinical care services (e.g., other services unrelated to psychological health and/or TBI), and resources (e.g., a directory that lists services available at an installation).

To identify, classify, and examine the range of relevant programs, researchers first sought to identify the full range of potential programs that were active in the period from December 2009 to August 2010 (e.g., through web and media searches, review of program materials and public domain documents, consultations with key personnel) and subsequently applied a set of inclusion and exclusion criteria to determine which entities were programs according to the study criteria. When possible, program personnel were interviewed to obtain relevant information about the nature of services provided, methods of implementation, populations served, and so on. Researchers identified a total of 211 programs.

## What Do Programs Do?

To better understand the types of services provided by the programs, researchers grouped programs based on their mission, goals, and activities. They identified three broad areas of focus (see the table), each of which is further categorized by two or more specific themes. Together, these themes encompass 23 key activities in which programs engage (activities not shown). Activities range from improving resilience to preventing domestic violence, operating a telephone hotline, conducting screening for mental health problems, and training servicemembers to provide peer-to-peer support for improving psychological health.

The study found duplication of effort across programs, both within and across branches of service. For example, large numbers of programs in each service and DoD-wide focus on providing training or education and/or on improving resilience and the ability to handle stress among members of the military community. Most programs focus their efforts on uniformed servicemembers, with some programs offering services to family members and civilian employees. In general, fewer programs focus on TBI than on issues associated with psychological health, which include depression, PTSD, substance use, suicide prevention, and general psychological health. Many programs focus on nonclinical issues related to families and/or children, resilience, stress reduction, deployment, or postdeployment and reintegration.

## Barriers to Maximizing the Effectiveness of Programs

RAND's analysis identified a number of potential barriers that should be addressed in order to maximize program effectiveness:

- **Decentralization.** Program representatives often noted that they did not know whether others in the DoD community had similar programs or materials that they could borrow or learn from, what approaches other programs had used, and whether other programs had been successful in the past.
- **Informal ties to the existing care system.** Relatively few programs are established in partnership with or sustain formal relationships with existing clinical or supportive counseling services. This lack of linkage and partnership can affect referrals to follow-up care.
- **Barriers to providing services.** The most common barriers included inadequate funding, resources, or staff capacity; potential concerns about the stigma associated with receiving mental health services, including fear of career repercussions; and inability to have servicemembers spend adequate amounts of time with the program

## Typology of Program Activities: Key Program Areas and Themes

Area	Theme
Preventing problems	Reducing the incidence of psychological health problems and TBI
	Employing public health approaches
Identifying individuals in need and connecting them to care	Providing information, connecting individuals to care, and encouraging help-seeking
	Identifying individuals with mental health concerns or TBI
Caring for servicemembers and families in need	Providing or improving clinical services
	Offering mental health services in nontraditional locations to expand access to care
	Nonclinical activities that provide support
	Responding to incidents of concern

staff and/or materials because of other obligations on the part of participants or providers.

- **Infrequent evaluation.** Programs are evaluated infrequently: Fewer than one-third of programs in any branch of service reported having had an outcome evaluation in the past 12 months.

## Recommendations

Based on the interviews with program representatives and the process of identifying these programs, researchers identified several high-level priorities for DoD.

**Take advantage of programs' unique capacity for supporting prevention, resilience, early identification of symptoms, and help-seeking to meet the psychological health and TBI needs of servicemembers and their families.** The strength of existing programs could be better leveraged in many ways. For example, programs can potentially play a unique role in training and education to support early identification of concerns and symptoms. Programs also offer opportunities to build skills in prevention and resilience among servicemembers and their families and can also serve as testbeds for piloting new and innovative approaches to psychological health and TBI care.

The figure presents an overview of the ideal characteristics of services provided by programs and by the existing delivery system, including clinical care and supportive counseling services. Under this framework, the majority of care provided in existing delivery systems should consist of treatment approaches that are supported by an empirical evidence base. Ideally, novel or unproven treatment approaches would be mostly avoided in this setting. Programs, in comparison, offer opportunities to test new and innovative approaches to

psychological health and TBI care and can provide a mechanism for building the evidence base for both clinical care and for nonclinical approaches. With appropriate research and evaluation to demonstrate program effectiveness, a subset of programs may be scaled up for widespread implementation, or program approaches might become part of routine care, when appropriate.

**Establish clear and strategic relationships between programs and existing mental health and TBI care delivery systems.** Programs should complement or supplement existing services. Programs may do so by focusing on sub-clinical psychological health issues, which can reduce some of the burden on the clinical care system and supportive counseling services; by focusing on prevention, resilience, and early identification of problems; by embedding mental health providers in nontraditional locations, such as within military units or in primary care settings; or by providing services in coordination with the clinical care system.

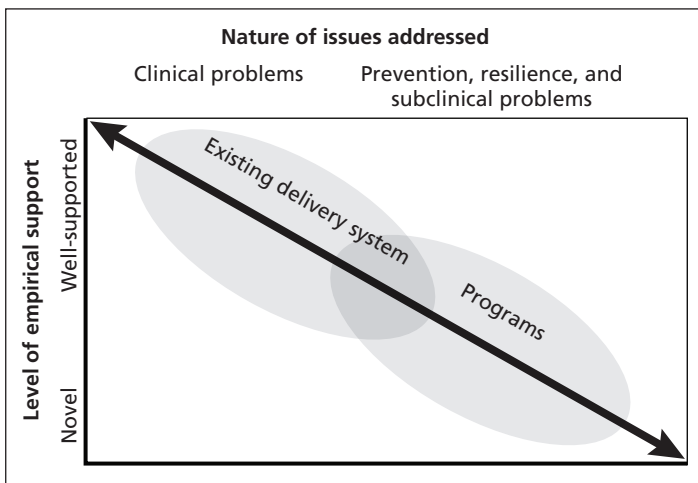
Ensuring appropriate referrals and transitions between providers and care settings is essential for ensuring that servicemembers' and family members' needs for care are met, that their care is continuous and coordinated, and that they transition safely between care providers. Referrals to existing clinical care systems should be tracked on a continual basis.

**Examine existing gaps in routine service delivery that could be filled by programs.** A formal, comprehensive needs assessment conducted throughout DoD is key to understanding what services are necessary for addressing psychological health and TBI. This assessment should establish the magnitude of demand for different types of services, the characteristics of individuals in need, and their geographic locations. This analysis should identify the full range of services needed, as well as the magnitude of existing need.

A formal gap analysis would provide an in-depth understanding of the extent to which existing programs meet the needs identified and where gaps exist that warrant the development of new programs. Further, adoption of a single departmentwide conceptual framework for psychological health across DoD would help reduce the current confusion and ambiguity when attempting to examine psychological health services and programs across the branches of service and would allow programs to be categorized and evaluated consistently.

**Reduce barriers faced by programs.** DoD should continue efforts to reduce stigma and institutional barriers associated with seeking treatment for mental health problems and TBI. It may be helpful for training messages within DoD to focus on mental health problems as part of a range of reactions to combat and operational stress, to emphasize help-seeking as an appropriate response, and to avoid setting unrealistically high expectations for resilience.

**Ideal Characteristics of Services Provided by Programs and the Existing Delivery System**



For servicemembers or family members participating in a program, continuity of care is important throughout the deployment cycle and across permanent change of station, and programs need a method to ensure such continuity. One model may be transitional coordination and coaching for servicemembers who are participating in programs or receiving clinical or supportive counseling services. The sharing of information also should be improved across programs.

**Evaluate and track new and existing programs, and use evidence-based interventions to support program efforts.** The evidence base regarding program effectiveness needs to be developed. Existing programs and those under consideration for future development should be required to embed an ongoing evaluation that addresses at least four key questions: (1) What works well? (2) What are the unanticipated consequences of the program? (3) What are the opportunities for improvement? (4) What lessons were learned during program implementation that can affect the successful transfer of the program to new organizations or locations?

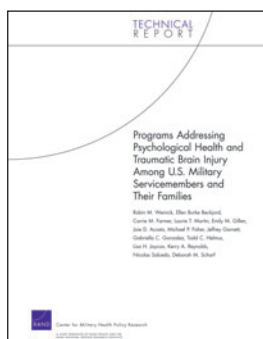
The evidence base regarding program effectiveness also needs to be centralized and made accessible across DoD. New programs should be built on the existing evidence base wherever possible and should focus on one of three approaches: (1) replicating programs that have been evaluated and shown to be effective; (2) using evidence-based components of existing programs or other evidence-based approaches to care provision to develop new programs; or (3) using new treatments, techniques, or materials that are

developed explicitly as pilot programs with appropriate plans for evaluation.

Programs that are shown to be ineffective should be discontinued and should not be replicated. To avoid the proliferation of programs without adequate evidence and the duplication of effort across services to identify best practices, DoD should identify a central authority charged with the coordination of programs between branches of service and within the Office of the Secretary of Defense, centralization of the evidence base regarding program effectiveness, and ongoing tracking of programs. Both new and existing programs should be tracked on an ongoing basis by a single entity, preferably the same organization that is charged with developing guidance regarding program proliferation.

## Conclusions

While the attention given to programs to address psychological health and TBI is both necessary and laudable, the proliferation of programs creates a high risk of a poor investment of DoD resources. Given the financial investment that the nation is making in caring for servicemembers with mental health problems and TBI, servicemembers and their families deserve to know what these investments are buying. Strategic planning, centralized coordination, and the sharing of information across branches of service, combined with rigorous evaluation, are imperative for ensuring that these investments will result in better outcomes and will reduce the burden faced by servicemembers and their families. ■



This research brief describes work done for the RAND Center for Military Health Policy Research, a joint endeavor of RAND Health and the RAND National Defense Research Institute, documented in *Programs Addressing Psychological Health and Traumatic Brain Injury Among U.S. Military Servicemembers and Their Families*, by Robin M. Weinick, Ellen Burke Beckjord, Carrie M. Farmer, Laurie T. Martin, Emily M. Gillen, Joie D. Acosta, Michael P. Fisher, Jeffrey Garnett, Gabriella C. Gonzalez, Todd C. Helmus, Lisa H. Jaycox, Kerry A. Reynolds, Nicholas Salcedo, and Deborah M. Scharf, TR-950-OSD, 2011, 182 pp., \$38.50, ISBN: 978-0-8330-5236-0 (available at [http://www.rand.org/pubs/technical\\_reports/TR950.html](http://www.rand.org/pubs/technical_reports/TR950.html)). This research brief was written by Kristin J. Leuschner. The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND®** is a registered trademark.

## RAND Offices

Santa Monica, CA • Washington, DC • Pittsburgh, PA • New Orleans, LA/Jackson, MS • Boston, MA • Doha, QA • Cambridge, UK • Brussels, BE



## Center for Military Health Policy Research

A JOINT ENDEAVOR OF RAND HEALTH AND THE  
RAND NATIONAL DEFENSE RESEARCH INSTITUTE

CHILDREN AND FAMILIES  
EDUCATION AND THE ARTS  
ENERGY AND ENVIRONMENT  
HEALTH AND HEALTH CARE  
INFRASTRUCTURE AND  
TRANSPORTATION  
INTERNATIONAL AFFAIRS  
LAW AND BUSINESS  
NATIONAL SECURITY  
POPULATION AND AGING  
PUBLIC SAFETY  
SCIENCE AND TECHNOLOGY  
TERRORISM AND  
HOMELAND SECURITY

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

This electronic document was made available from [www.rand.org](http://www.rand.org) as a public service of the RAND Corporation.

### Support RAND

[Browse Reports & Bookstore](#)

[Make a charitable contribution](#)

### For More Information

Visit RAND at [www.rand.org](http://www.rand.org)

Explore the [RAND Center for Military Health Policy Research](#)

View [document details](#)

### Research Brief

This product is part of the RAND Corporation research brief series. RAND research briefs present policy-oriented summaries of individual published, peer-reviewed documents or of a body of published work.

### Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND electronic documents to a non-RAND website is prohibited. RAND electronic documents are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).